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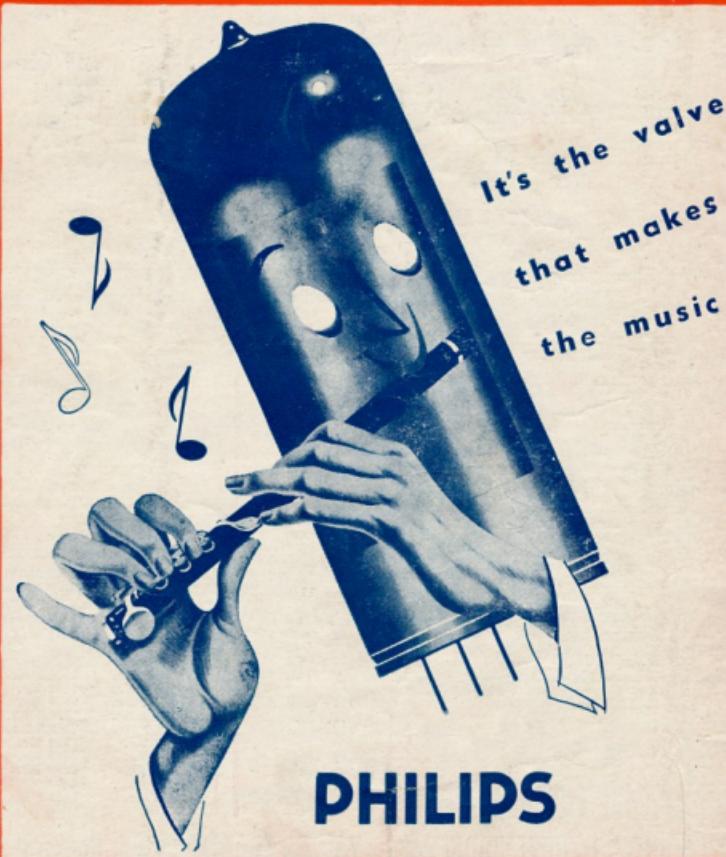
Amateur Radio

JOURNAL OF
THE WIRELESS
INSTITUTE OF
AUSTRALIA

For the Experimenter
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3511.2 Ke.	7012.5 Ke.	7177 Ke.	8155.71 Ke.
3514 Ke.	7013 Ke.	7179 Ke.	8161.538 Ke.
3517 Ke.	7029 Ke.	8019.5 Ke.	8171 Ke.
3335 Ke.	7032 Ke.	8021.5 Ke.	8182 Ke.
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WI BROADCASTS

All Amateurs are urged to keep these frequencies clear during, and for a period of 15 minutes after, the official Broadcasts.

VK3WI: Sundays, 1100 hours EST, 7196 Kc. and 2000 hours EST 50 and 144 Mc. No frequency checks available from VK2WLI. Inter-State working frequency, 7178 Kc.

VK3SWI: Sundays, 1130 hours EST, simultaneously on 3598 and 7196 Kc. and re-broadcast on 50 and 144 Mc. bands. Inter-State working frequency 7185 Kc. Individual frequency checks of Amateur Stations given when VK3WI is on the air.

VK4WI: Sundays, 0900 hours EST, simultaneously on 7196 and 14345 Mc. 7065 Mc. channel is used from 0930 to 1030 hours each Sunday for the W.I.A. country hook-up. No frequency checks available.

VK5WI: Sundays, 0930 hours SAST, on 7196 Kc. Frequency checks are given by VK5SDW by arrangements only on the 7 and 14 Mc. bands.

VK6WI: Sundays, 0930 hours WAST, on 7196 Kc. No frequency checks available.

VK7WI: Sundays, at 1000 hours EST, on 7196 Kc. and 144.5 Mc. No frequency checks are available.

AMATEUR RADIO

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Melbourne, C.1.

EDITORIAL



Release of the 21 Mc. Band

As members may well remember back in Atlantic City in 1947 a frequency table was decided upon by the International Telecommunication and Radio Conference which would allocate frequencies for all the various types of radio services on an engineering basis.

At this Conference were delegates from every country in the world, meeting together on an international footing in order to arrive at some agreement whereby the radio frequency spectrum as we know it today could be divided up in a systematic manner so that the requirements of all countries could adequately be met.

This in itself was a superhuman task, and it is a credit to mankind that at a conference of this nature where languages create such a difficult obstacle to conversation, a frequency table as is now in existence was possible.

However, despite the presence of the Frequency Table, the implementation of it seemed a remote objective until the Extraordinary Administrative Radio Conference held in Geneva in 1951. At this Conference steps were taken to commence the implementation of the frequency table in that part of the frequency spectrum below 27.5 Mc. the responsibility remaining with Administrations to implement the various transfers of services to frequencies agreed to at the Conference, some of which were to be implemented on certain specified dates.

So far as the Amateur band frequency allocations are concerned for Region 3 (which includes Australia) under the Frequency Table agreed to in 1947 at Atlantic City, we would

ultimately lose 50 Kc. in the 7-7.2 Mc. and 14-14.4 Mc. regions, and gain the 21.0-21.450 Mc. frequency allocation.

Over the period since 1947 we have made strenuous approaches to the Australian Administration requesting the implementation of these frequency agreements to which Australia was a signatory. In every instance the Administration Authority has appreciated our approach and given a sympathetic hearing to our requests, but for many reasons—too numerous to recount although well recognised as difficult obstacles against immediate implementation—it has not been possible.

After we became aware of the Agreement reached at the Geneva Radio Conference concerning measures for the implementation of the lower part (below 27.5 Mc.) of the Atlantic City Frequency Allocation Table, we again pressed the Amateurs' case with the Australian Administration.

Arising from our discussions we have every reason to expect that implementation of the Amateur bands within the spectrum encompassed by the Agreement reached at the Geneva Conference will take place about the 1st May, 1952.

We feel justly proud of the fact that we have been instrumental in gaining the implementation of these frequency changes on behalf of the Australian Amateur, and although our two lower frequency bands have been reduced by 50 Kc. on the high end—which of course we all knew would inevitably be so—we have gained a band that should be an excellent DX band as well as an additional band.

—FEDERAL EXECUTIVE.

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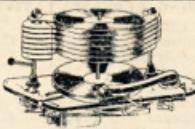
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Low Power 2 Metre Crystal Controlled Transmitter

BY K. B. MITCHELLHILL, VK2ANU

In warmer weather most v.h.f. fans and newcomers to v.h.f. bands are usually constructing and overhauling gear for greater activity.

On looking through current radio magazines it is noted that there has been very little space devoted to the construction of gear for the 144 Mc. band in the way of transmitters of the crystal control type. As modulated oscillators are gradually giving way to crystal control and transmitters of better stability, the low power rig here described should be of interest to many in getting to 144 Mc. using a VT501 disposals tube as a series tuned tripler (civil type TT11). Ratings of this tube as known are: 250v. plate, 250v. screen, 6.3v. heater at 0.8 amp. Such tubes were used up to 130 Mc. in airborne v.h.f. equipment.

To most of us the ultimate is to use whatever gear is available in the junk box without spending too much money, as is the case where v.h.f. equipment is concerned. The only outlet in this case is for an 832 and socket. This tube is not by any means the only one that has been successfully used as a final, as the tripler output is ample to drive a pair of 7193s in push-pull.

The main point of interest is firstly to get to 144 Mc. and the method of coupling to the 832 final.

far as various crystals are concerned, especially where crystals are somewhat sluggish.

Next tube in line is the 6F6 doubler; the tuning condenser being mounted on the front panel of the chassis between the 6F6 doubler socket and the VT501 tripler socket to ensure the shortest of leads.

From here the remaining tank circuits are mounted above the chassis. The VT501 is mounted vertically; this allows correct length for the 144 Mc. series tuned coil and room for adjustment. The series tuning condenser is mounted on a metal panel on the front edge of the chassis so that it supports the cold end of the coil and gives sufficient room for the 832 grid coil to come directly off the grid pins for mounting beneath the tripler plate tank.

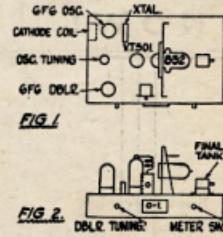
It is advisable to mount all components up to the VT501 tank circuit. The 832 is then mounted horizontally on a bracket and with the grid coil mounted on the socket, the bracket is then slid along the chassis until a suitable position is found where the grid coil sits directly under the cold end of the tripler plate tank coil. This ensures the shortest of leads.

In the 832 plate tank, the coil is constructed with half inch spacing between the two sections, i.e. the coil is wound

this case the base of an old ceramic padding condenser.

For neutralising, two lengths of No. 16 s.w.g. enamel wire were soldered to the grid pins, crossed over and continued through insulated bushes in the bracket holding the 832 as far as the top edge of the 832 plates viewed through the glass envelope. These wires are bent relative to the tube elements until there is no further flicker in grid current when the plate tank is tuned through resonance. For neutralising the voltage is removed from the plate and screen of the 832.

The r.f. chokes used were originally taken from an I.F.F. set and are ideal.



The circuit diagram shows a series heater circuit as the writer's power supply is derived from a 32 volt lighting plant. Modification for other voltages is a simple matter. The high voltage is obtained from a generator delivering 250 volts at 100 Ma.

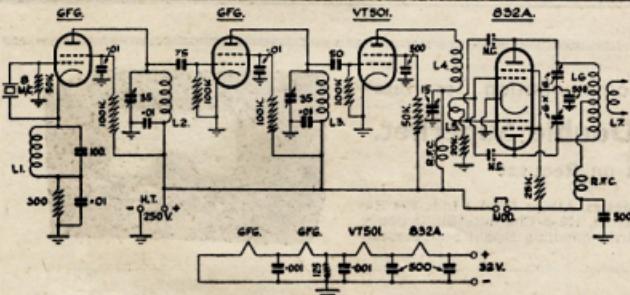
Total current drawn by the two 6F6s and VT501 tripler is in the vicinity of 50 Ma., allowing the remaining 50 Ma. for operation of the 832. In operation, the 832 is loaded to 40 Ma., being an input of 10 watts.

TUNING

After preliminary adjustments have been made and the various circuits put on frequency with an absorption wavemeter, tuning of this little rig is straightforward. As the output of the VT501 tripler will over-drive the 832, the doubler circuit is detuned so that the final grid drive is 2 Ma. which is found to give most efficient operation. Detuning the doubler circuit does not appear to affect operation in any way as it is better to detune this circuit in preference to the tripler in view of efficient operation.

The only circuits metered are the 832 grid and plate. The modulator used with this little rig is p.p. 6V6s in Class AB1, plate and screen modulating the 832 final.

Mounting of the tripler plate tank is shown in Fig. 2 and the method of mounting the 832 grid coil will be seen from Fig. 1. The coupling is such that both coils are tuned by the tripler plate tank condenser, and the coupling is adjusted by experimentally squeezing the coils until maximum grid drive is obtained.



- L1—7t. No. 20 s.w.g. on large valve base.
L2—7t. No. 16 s.w.g., 1" diam., close wound, self supporting.
L3—4t. No. 16 s.w.g., 1" diam., spaced $\frac{1}{2}$ ".
L4—5t. No. 16 s.w.g., 1" diam., spaced $1\frac{1}{4}$ ".

- L5—2t. No. 16 s.w.g., $\frac{1}{2}$ " diam., spaced $\frac{1}{2}$ ".
L6—4t. $\frac{1}{2}$ " copper tube, $\frac{1}{2}$ " diam. with $\frac{1}{2}$ " space at centre.
L7—2t. No. 16 s.w.g., $\frac{1}{2}$ " diam., spaced 1 turn.

CONSTRUCTIONAL POINTS

The transmitter is constructed on a chassis 16" x 6" x 3" as indicated. The first tube is a 6F6 used as a triplex oscillator with an 8 Mc. crystal tripling to 24 Mc., the plate circuit being fixed tuned by means of a 3-30 pF. air trimmer. The cathode coil is made to plug into a socket mounted on the end plate of the chassis near the oscillator tube socket.

A little time spent in adjustment of the cathode coil will pay dividends as

in two halves with half inch between the two, allowing space for the antenna coupling coil. This coil is mounted directly onto the condenser, which in this case was a modified condenser taken from a TR1143, stripped down to three fixed plates in each stator section with three plates left for the rotor. The condenser is mounted on brackets to bring it to the height of the 832 plate pins and is connected to the plate pins with half inch lengths of copper strip or flattened braid and small Farnsworth clips from an old dry battery. The antenna coupling coil is supported on a small ceramic strip, in

* "Inglewood," Muscle Creek, Muswellbrook, N.S.W.

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Part viii.—

Interference, and How the Hams Can Check It

BY KEN WALL† AND JOHN JARMAN,* VK3ADA

Let us put the clock forward by a few years and imagine that Australia's long-awaited television service is at last in operation.

John Citizen, having purchased and installed his television receiver, is now enjoying his favourite evening programme, when alas! Just as his favourite strip-tease artist is about to shed her last garment, something goes wrong. A burst of interference makes the picture either invisible, or distorted beyond recognition!

Enraged with disappointment, he must blame somebody and who is a better "sitting target" than Bill, the nearest Ham, who is duly visited. We censor John's "opening address" as Bill opens the door to him.

Now a television receiver is prone to all kinds of interference and quite likely Bill (who could be any reader) is "not guilty." He might not have even been on the air and probably feels like telling John to go and get a better receiver.

Remember, however, that there are other Hams on the air whom John may suspect, unless shown the real cause of the trouble, so that an indifferent attitude on Bill's part may provoke complaints about Ham interference, which are neither justified nor necessary, and which won't help us, as an organisation, to obtain further privileges when we apply for them.

We see, therefore, that Bill's duty is not only to prevent his own rig from causing television interference (abbreviated t.v.i.), but to help the complainant locate the real cause.

Furthermore, all radio shops will probably be closed at this time of night, so that Bill may be the only "radio bloke" available, and any assistance on his part will be appreciated.

Now Bill is not a trained television serviceman and to tamper with a delicate instrument like a television set would be most inadvisable. What can he do? Well, having proceeded to examine John's receiver, he should try and place the fault in one of the following categories:

1. Simple receiver faults which he can rectify.
2. Serious faults to be fixed only by a television serviceman.
3. Amateur interference.
4. Interference from some other radio station.
5. Interference from faulty electrical appliances.

Now this cannot be done by mere guesswork. It requires careful investigation combined with an elementary knowledge of television theory, and this is just what these articles have been intended to provide.

† 172 Johnson Street, Maffra, Victoria.
* A11426 L.A.C. Jarman, J. B., c/o.
A.R.D.U., R.A.A.F., Woomera S., South
Australia.

Let us first consider what interference Bill's transmitter might have caused.

Since Australian television signals will be on frequencies from 180-204 Mc., Bill's main "bug-bear" will be harmonics and parasites. We have also learnt that our system will use 25 pictures per second, and 625 lines per picture, which amounts to 15625 lines per second. Now suppose a spurious signal, on a frequency within the television band originates from a Ham Station, using a modulating frequency of 3125 c.p.s. Now the spurious signal will also be modulated at this frequency. How will television receivers respond to it? Well, 3125 is one-fifth of 15625, so that every fifth line will be darkened, so that dark horizontal bars appear across the screen.

In actual practice, of course, the signal will be modulated by a multitude of audio frequencies, so that the bars will not remain steady, but will move vertically, flashing on and off with modulation. A similar effect occurs when the interfering signal beats with the required one. If the resultant frequency exceeds 15625, the bars will no longer appear horizontal, but become sloped, and varying in thickness.

Another common form of t.v.i. is the upsetting of the synchronisation. We learned in article vi. that most receivers distinguish the synch. pulses purely by their amplitude, and can therefore mistake any interfering signal of sufficient amplitude, for synchronising signals, so that their deflection oscillators get "out of step." One therefore sees, on the screen, not a steady picture, but a series of pictures, joined end-to-end racing madly across, either horizontally or vertically.

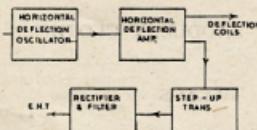


Fig. 1.—Popular method of obtaining High Voltage for Tube.

Indirect forms of Ham interference occur where the mains voltage has poor regulation, so that every time Bill presses his key, the lights go dim. The effects on neighbouring television sets will vary, according to design, and here we shall pause, to explain two innovations.

We know that a cathode ray tube requires very high voltage on certain elements, and in a television receiver this is known as e.h.t. (extra high tension) as distinct from the normal h.t. or B plus supply, and methods of producing it vary. Mains transformers are not favoured in television receivers, since their positioning, to prevent their

magnetic fields from interfering with the scanning spot, is too critical and introduces design problems.

The familiar a.c.-d.c. circuit, as used in some broadcast receivers, is therefore commonly used and one popular method of producing the e.h.t. is to step up the output of the horizontal deflection oscillator as outlined in Fig. 1.

In receivers using this circuit a change in mains voltage may cause a change in either picture brightness, picture width, or both.

The other modern source of trouble is the automatic gain control circuit, incorporated in some receivers. In a vision receiver, the a.g.c. voltage is applied to the r.f. and i.f. stages as in a sound receiver, but it is obtained in a different way. We are familiar with circuits in which the a.g.c. voltage is proportional to the average value of the signal. Now, in television, this voltage is made proportional to the peak amplitude of the signal or, in other words, the amplitude of the synch. pulses. Special circuits must therefore be used, one type being shown in Fig. 2.

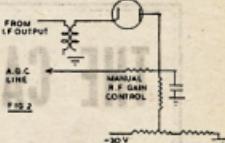


Fig. 2.—Simple A.G.C. Circuit for Vision Receiver.

The values of the components in any a.g.c. circuit are very critical, and if incorrect, such circuit will be affected by any impulse interference and any change in mains voltage. Either may weaken or completely "blank out" the picture.

There are other cases when the interference may be the fault of the receiver, rather than the Ham. Some faults may cause a receiver to respond to signals from a Ham transmitter that is operating quite normally. These include:—

1. Cathode ray tube grid picking up 80 metre band signals directly.
2. R.F. stages admitting signals within i.f. band.
3. Generation (by mixer) of harmonics of Ham signals, within i.f. band.

Another fault, for which innocent Hams are often blamed, is the "leakage" of sound signals into the receiver's picture circuit, since this produces the same "dark bar" effects as Ham interference.

Overseas, these faults have often resulted from poor receiver design, but in Australia this is less likely. Our receivers will be designed upon the very latest advice from overseas engineers who, in their years of experience, have had to contend with all kinds of interference (Hams included) and will surely take all precautions against same.

Bill is therefore likely to strike this trouble only on three occasions:—

1. When receiver has been tampered with.
2. When receiver has deteriorated with age.
3. In a home-built set.

Continuing the story, let us first take the case when Bill has been on the air,

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Connections for "Woden" Types UMI, UM2 and UM3 Modulation Transformers

Primary Connections For Modulator Tubes	Secondary Connections and Impedances for R.F. Load																											
	Join 9 & 10 Con. to 7 & 12			Join 9 & 10 Con. to 8 & 11			Join 7 & 9 Con. to 7 & 12			Join 10 & 12 Con. to 7 & 10			Join 3 & 4 Con. to 1 & 6			Join 3 & 4 Con. to 2 & 6			Join 3 & 4 Con. to 1 & 6			Join 1 & 4 Con. to 2 & 5			Join 1 & 4 Con. to 2 & 5			
	A	Audio Tubes	C	A	C	T	A	C	T	A	C	T	A	C	T	A	C	T	A	C	T	A	C	T	A	C	T	
Impedance	A	Ohms	CT	A	7 & 12		8 & 12			7 & 10			8 & 10			7 & 10			8 & 10			7 & 10			8 & 10			
2000	2	3—4	5	8600	6350	4300	3620	2150	1070	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	200	—
2000	1	2—5	6	15700	11400	7900	6650	3920	1950	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	350	—
3000	2	3—4	5	13000	9400	6500	5500	3240	1620	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	300	—
3000	1	2—5	6	23500	17000	11800	10000	5900	2950	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	520	—
3800	2	3—4	5	16400	12000	8200	7000	4100	2050	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	380	—
3800	1	2—5	6	29800	21500	15000	12800	7500	3740	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	660	—
4000	2	3—4	5	17400	12500	8650	7300	4300	2160	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	400	—
4000	8	9—10	11	—	—	—	—	—	—	5500	3450	2850	1850	1380	—	—	—	—	—	—	—	—	—	—	—	—	250	—
5000	2	3—4	5	21600	15700	10800	9150	5400	2700	—	7000	4300	3500	2300	1730	—	—	—	—	—	—	—	—	—	—	—	500	—
5000	8	9—10	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	300	—
6000	1	3—4	6	8600	6350	4300	3620	2140	1070	—	8300	5150	4250	2750	2180	—	—	—	—	—	—	—	—	—	—	—	200	—
6600	8	9—10	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	370	—
6600	1	3—4	6	9500	7000	4750	4000	2350	1180	—	9100	5650	4660	3000	2400	—	—	—	—	—	—	—	—	—	—	—	405	—
7000	1	3—4	6	10000	7300	5050	4280	2500	1250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	230	—
7000	8	9—10	11	—	—	—	—	—	—	9700	6000	5000	3200	2400	—	—	—	—	—	—	—	—	—	—	—	—	430	—
8000	1	3—4	6	12000	8400	5800	4900	2900	1440	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	270	—
8000	8	9—10	11	—	—	—	—	—	—	—	11000	6900	5650	3700	2760	—	—	—	—	—	—	—	—	—	—	—	500	—
9000	1	3—4	6	13000	9400	6500	5500	3200	1620	—	—	—	12500	7750	6300	4150	3100	—	—	—	—	—	—	—	—	300	—	
9000	8	9—10	11	—	—	—	—	—	—	—	—	—	6200	3900	3200	2050	1550	—	—	—	—	—	—	—	—	275	—	
10000	1	3—4	6	14400	10500	7200	6100	3600	1800	—	—	—	14000	8600	7100	4600	3450	—	—	—	—	—	—	—	—	330	—	
10000	8	9—10	11	—	—	—	—	—	—	—	—	—	6900	4300	3500	2300	1740	—	—	—	—	—	—	—	—	600	—	
12000	7	9—10	12	—	—	—	—	—	—	—	8300	5150	4250	2750	2070	—	—	—	—	—	—	—	—	—	—	370	—	
12000	1	3—4	6	17400	12500	8700	7250	4320	2150	—	—	—	9700	6000	4900	3200	2440	—	—	—	—	—	—	—	—	430	—	
14000	7	9—10	12	—	—	—	—	—	—	—	—	—	11000	6900	5600	3700	2789	—	—	—	—	—	—	—	—	500	—	
16000	7	9—10	12	—	—	—	—	—	—	—	—	—	12500	7750	6300	4150	3140	—	—	—	—	—	—	—	—	550	—	
18000	7	9—10	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	400	—

List No.	Audio Watts	R.F. Input Watts	Max. Sec. Current	L. W. H.	Overall Size	Weight lbs. ozs.
UM3	120	240	250 Ma.	54" x 54" x 54"	14	8

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FIFTY MEGACYCLES AND ABOVE

Compiled by J. K. RIDGWAY, VK3CR.

NEW SOUTH WALES

The March meeting of the V.H.F. Group, held at Science House, was devoted to a lecture on s.v.c. and its application. The lecture was very well received by Mr. Arthur Sauer, 2AUW, of A.W.A. Some very interesting points were raised during the lecture and subsequent questions and answers which show that s.v.c. is a subject which is not quite so straightforward as it sounds.

Present at the meeting were two country visitors, John 2AMV, from Forbes, and Norman Moody, from Coonamble. Both visitors were made welcome; country members with their own shack represent the дух of the V.H.F. Group meetings as the v.h.f. parties are always pleased to see country members. The meetings are held on the first Friday in every month, at Science House, Gloucester Street, City.

The annual field day coincided with the Victorian Group's attempt to pass a signal from VK7 to as far north as possible, but it was considered too late to change the arrangements for the VK2 field day in order that VK3 could compete. It is hoped, however, to do some things along the lines suggested by VK2 might be possible later in the year. Interested parties in VK3 might look out for 2MQ or 2ANF on the 7 Mc. band in order that some preliminary arrangements may be discussed.

50 Mc. News. With the passing of the DX season activity has waned on this band and news is scarce. Tropospheric propagation conditions seem to follow after the decline of the sporadic E conditions and contacts from the city to the northeast are becoming very good. Stations heard from the north include 2ADT, 2ANU, 2VU, 2RZ and 2AHA. It goes without saying that 2RU, from Gosford, has been putting in the usual S9 signal in the Sydney area.

2HE finally made contact with 2ADT after much trying at the wrong times or when the other one wasn't there. The half cubic quad antenna gave a very good result. The half wave dipole with 50 watts to a pair of 80's and feeds they need plenty of drive to make them behave, 2AJR finally got a crystal mike but now finds he doesn't need one, as one station at least can copy him with no noise problem. No stations offered for the solution of that one, 2LY, ex-2AFL, ex-2LY, having returned to VK2 has got his old call back again and is active on the band again.

144 Mc. News. Conditions on 144 Mc. have been very good with extended ground waves working to the north and south shore, especially on 2GZU. Canberra is active again, having cleared up the trouble in his Tx. His frequency is 144.0 Mc. in the country zone and he would be heard frequently calling Sydney stations at 8.30 p.m. The 144 Mc. band has been in use for five minutes and then Sydney stations call 2GU for five minutes. 2ADT has been putting an excellent signal into Sydney during the evenings. Jack usually tunes across while calling and answers on two. 2KX has also been a regular caller. Sydney and over nearly made a full two-way contact with 2ADT. We understand Cec will present a cup to Jack if the contact is made! What sort of cup?

Activites in the west have been less than usual, with 2NS and 2OZ on holdovers and 2WH busy getting his new final under control. 2TA and 2TC at Young are both putting in some good work and Jim, 2TC, is building a cascade converter for the band which, along with his new power supply, should be able to make quite a contribution to his attempt to contact Sydney. In the city, 2AJZ is still building crystal locked converters. The latest one is for portable use and to be used with Cec's Trans. Tax. His next neighbour, 2ABH, who is currently living at Katoomba, is watching Harry with interest and seems about to launch off into something rather special in the way of Rx's himself. 2WZ has just finished a new power supply and is using a circuit which performs very well. A new call is 2ATO. John is located at Drummoyne and has been heard many times in the past from his brother's station. Welcome to the band John.

Harris 2M400, Port Kembla, 2HL, is organizing another trip, this time to Barrington Tops. Gear for 144 Mc. with 50w, and also 7 Mc. gear will be taken. The party will include Charlie 2NP, Cec Cronan and Graham Allen. They hope to get in contact with many of the country v.h.f. enthusiasts from their vantage point 5,100 ft. above sea level.

2HL has also struck a very good blow for Ham Radio by carrying out a test call behalf of the Radio Research Board. The R.R.B. does not consider the possibility of path existing between Sydney and Camden on bands above 100 Mc. 2HL took off complete with GJ65 tripl. rig and ARRE2 Rx plus observers from the R.R.B.

and proceeded to make easy contact with Sydney, receiving 2AH and 2ANF at very good signal strength, thusounding the experts! Good job you, Morris!

37 Mc. News: Once again news is scarce from this band for the usual reason. 2BZ has his Rx under control at last and is now able to receive most of the Sydney stations. 2HL has had the 37 Mc. band under control for some time on 376 with most of the active Sydney boys wandering in and out on 376. Current shortage of lighthouse tubes is embarrassing to those with ASB and 8 RXs, but quite a few of the R.R.B. stations are using the 37 Mc. push pull RLLB variety but recently some interesting information has come to light on push pull and push push multipliers using diodes, e.g. EA50, so perhaps stabilized transmissions are now feasible. With the recent narrowing of Rx bandwidth this will allow results may be somewhat more encouraging.

With these notes your scribe (2ANF) will be completing his year of duty as correspondent. As yet the new correspondent has not been elected, but it will be done in the next few months onwards. It is hoped that the next scribbler receives the full support of all those on the v.h.f. bands. Remember to pass on any information worth repeating. If, when you heard it you were interested, others will be also.

VICTORIAN V.H.F. GROUP

Next Group meeting is the 21st May at the rooms. Listen to 3WI for details of the evening's activities. The March meeting was well attended and was fully occupied with sections, office-bearers for the ensuing year, reports on field days, arrangements for the April field day and progress reports on the 144 and 50 Mc. rigs for VK7. The office-bearers for the new year are: Chairman, 3JO - See 3AJD; Vice-Chairman, 3YS; Asst. Sec., 3OJ. Reports by portable stations were given on their activities on the field days of Feb. and March and it was seen that most activity was on 144 Mc. - some stations were active on 50 Mc. but the wireless reports of activity on 228 Mc. and 376 Mc. Weather conditions for the April field day were good although there was a thunderstorm during the afternoon. Portable stations were 3FZ Mt. Dandenong, 3ABA Mt. Tarrawonga, 3AEC Mt. Blackwood, 3GM Mt. Buntingup, 3AEB Mt. Macedon, 3JO Kinglake, 3YR Sorrento, 3ADU Keilor, 3RE Reed's Lookout, Grampians, and 3UJ who went portable near the Waranga Basin when the portable supply was cut off.

Next field day, 3TPE hopes to operate portable from Mt. Borrow from where no difficulty is expected in contacting VK3. 3IM and 3QO reported on progress they have made with the 144 Mc. and 50 Mc. buildings for 3IM and their hams have been brought in and further stages nearing completion. Apart from field days, activity on the bands has been very slight, several stations, including yours truly (3JO), have been very inactive of late.



Group around Tx and Rx set up on the hill near 3EX's Tx on 6th April when contact was made with Hobart on 144 Mc. Fred (in front); 3PF, 3LZ, Associate G. Compton, 3GM; at rear, 3AM (left), Master R. Firth, and 3LX.

SOUTH AUSTRALIA

V.h.f. enthusiasts will be pleased to learn that the 144 Mc. contact between 3BDO and 5GL was repeated on 22nd April after the first contact and that 5QR also made contact with 3BDO. Fine work all round. There are reasons to believe that March is the best time to make an attempt to penetrate the world of 144 Mc. and an endeavour is being put into each State with equipment ready and tested to co-operate for a series of tests over a week-end or two in March, 1953.

A break through on 50 Mc. one night during March to VK5WI is good news, and local rate-chews. At the Royal Adelaide Exhibition great use is made of 50 Mc. by link stations relaying answers to calls by VK5WI on 14 Mc., thereby overcoming the terrible interference in the area caused by the electrical appliances operating at the exhibition. Self rostered nightly, and doing excellent work, is 5GL, 5LW and 5HD. A 288 Mc. link has not been so successful. 5WI on 50 Mc. was heard QSOing twice.

TASMANIA

144 Mc. News: Around Hobart this band is the most popular, a CQ generally results in many replies. The 144 Mc. AFTRX, being used on for some time, 3JD went QRT and came up o.c. At the moment a converter v. superhet is keeping the refered "Tiny" on his toes. The TR143 gave 7OM some strife, but he has it working very nicely now and time for the feature on some Bob! Sure the other boys with them would appreciate it. 7AF just finished v.h.f. grid dipper which should speed up the modelling of a 1413 Tx and R1225 Rx, hope to hear from 7AF. 7BL, 7DZ and 7E are using 7DH and 7LE make interesting contacts for fixed stations. Both the c.e. and run about 5W. input.

On 6th April 7LE and 7OB went to Mt. Wellington, while 7AF, 7DZ and 7PF built took equipment on 7EX's hill with hopes of relaying to VK3. Signals between north and south were +3, but 7LZ and 7PF were unable to contact VK3. We think there must be a gromme around one of the wires in the link, or else dead. However, 7LE-7OB also worked 7JD, 7AJ and 7DH who was mobile at Blackman's Bay. Signals between 7LZ and 7PFs on 7EX's hill and 7KB at Burnie were R5 without the antenna on the Rx.

Going up the mountain, the 12v. battery in the car, 7LE's car turned over. Results, two thirsty Hams, as the acid was diluted with the contents of one flask. Just as well your knowledge covers a wide "scope". Bob or your 3 element beam didn't have to be bad to make him run. 7AF managed to pull the beam down. Whose sig were you chasing when that happened Len? The Hobart gang are awaiting a signal from 7MY at Sandford with interest.

DX NOTES BY VK4QL*

Last year I made comment that the bottom of the "DX Bucket" had been reached. If somebody had said, "You haven't heard anything yet," they would have been aptly referring to the present DX conditions. One has usually been able to find one band useless, but others to overcome the DX situation. The last big hole exists. 4CC told me last year to work all the DX I could then, as IS9Z would not produce much. From your Crystal Ball Clive, where do you expect the bands to show some improvement?

The DX contests with stations worked shown *, and times in GMT (Z time):—

3.5 Mc.: 3RA seemed to do very well in the A.R.R.L. Contest, his contacts being unknown, but the first week-end he had a multiplier of 100. In the same contest 3W3 and a K1L were the sum total. 3CF worked all W districts except W5 on the 18th. TRK found static very severe, but could not hear any of the Ws. The others were working. 3WV found one week-end OK, the other of little help. SPV heard G6CJ, G3HTQ, OZ1BY and SM2ACW. I ran a sked with ZS3K, and although I heard him, no contact could be made. DU8RG and ZE2RZ were also active.

3 Mc.: Although in this neck of the woods, not much success was attained, others found it profitable, but erratic just the same. I could hear strong W signs between 3800z and 0100z once or twice. It's struggle to hear W or VE at any time now. The Europeans and Africans were very patchy. Just the same, 3CF worked FAB, HB9, YU3, G, GW, LB4VW (Antarctic), DL, ZE1P, ZE1OK, SM2ACW, VP1H, SP7PP, ZS2CS, the 8th, between 0700z and 0810z, six Gs and HBs were contacted. Athol also heard ZDIAC, CX1KB, KP4KD, EASDG, ZD2GAY, CN8M1, ZB1AXP, FFAIG, UQ2KAA, PY2QW, PY2R, ZB1BQ, ZA1X, the whole bunch an impressive list. ADF who had a two el. fixed beam on Europe, lists YU*, SM*, FB*, F9*, G5*, HB*, DL*, CE1KN, IS1IAHK, 4X4DE, 4X4DC, EASDF, ZS6GW, VP6CDL. Is just getting into his DX stride, being a DX "hedging". TRK heard some very strong sigs from the Ws.

* Fit/Lt. F. T. Hine, No. 10 (G.R.) Squadron, R.A.A.F., Townsville, Queensland.

in the contest, also G8T 0700z, YV5DE, KX6AH, Ray found like me, KX6AH does not answer VK calls. He thought he had a nice catch in SM8BNA, but found he was marine 200 miles from Adelaide. He was strong here too. Ray: ZD2GA, who could not hear a reply to his QSL card, QSL, 7P5G, KARAN, ZI4AF, SA2TT, W3*, and WA 2100z, KZ5CS, SU1FD, K6QY, VP5BH (Caymans), G3BKF and G6BS 0745z, ZS3K*, VS2LP*.

H. Mc.: Nobody content with the performance of the DX contests, and all contributors voice the same opinion. ZACK, who by the way is not changing his QTH to 1000z, has a contact with VP8AJ, Graham Land, which gave him 222/210. Arthur received cards from EA4AB and FER1A, and ZW1X, who was the first to work them. Also HE1 and LZ1AS. Received QSLs from OQ4OL, EG3FM, 4JL had trouble maintaining his sked with G5ZA, but managed to reach his 600th contact with him before he gave up. For the last 10 days he has been smacking around the band, and has received cards from EA6AM, KB8AQ and IS1IAHK. TRK has little to raise the eye brows for this band other than PY1AP, 0232z, TIZRC. 8KX, who will never be forgotten, did not like the conditions much especially with the approach of the B.E.R.U. contest, but Russ hit a purple patch on 14 Mc. for the Gt. Plenty. Plenty could be heard calling him, yet I could not get one. WVE had hard luck, and about 0430z, 4Q1 did not hear much, other than K56AA, YN1AA, PK3AAA*, VP1AA*, VP1AA*, ZK2AB*, VQ4HJP, 0430z, LZ1AS, PZIOY.

3.5 Mc.: This band liked me more. TRK heard some very strong W signs in the DX Contest, as did I. Other than that, Pacific stations were the limit.

KV4AA gives some help for the "gen" section this month. ZL1BY has worked through to the Ws on 160 mx. Dick said over there they are trying to get the 160 Mc. band on the 1st May. He gave the following new prefix allocation: SA2T for Amateur use in Tripolitania, SA2C in Cyrenaica, and SA2P in Fezzan. KV4AA worked quite a few Ws on 160 mx in the A.R.R.L. Contest and he finished with a multiplier of 99. 4DO was hard working SA2TY, who gave his QTH as Ashdan, which does not follow the previously mentioned allocation. 3CP said TT1CW is quite OK, and YA4UU

has been heard, but no known VK contacts. According to "QST", the EK1 prefix is to be changed to CNA. Add the new prefixes to those in the recent news of "A.R.R.L." JVA-JVZ, Jordan, JZA-JZZ Dutch New Guinea. PK5AA told me he is shortly returning home. Am still waiting on his long overdue QSL. Let's have a look at the DX contests. There are quite a few high speed stations on the band, some using U.S. prefixes, so it can be reasonably expected they will disappear on the release of the band to U.S. Amateurs.

• The thought for the month, which must be in the minds of us all these days, is the wish for a very early improvement in DX conditions.

DX C.C. LISTING

PHONE

Call	No. Ctr.	Call	No. Ctr.
VK3EE	10 158	VK4K5	9 135
VK3JD	1 155	VK3CLN	.. 11 132
VK4HR	12 155	VK4PJ	21 129
VK3HZ	3 154	VK4P	.. 6 126
VK3EU	1 153	VK4EB	.. 17 126
VK2KL	4 145	VK4WJ	.. 17 122

C.W.

Call	No. Ctr.	Call	No. Ctr.
VK3HZ	6 200	VK3CX	26 140
VK3FH	15 177	VK3CB	10 138
VK3JF	1 155	VK3CB	.. 10 138
VK4EL	9 167	VK3BO	.. 33 133
VK2EO	2 152	VK2GW	16 132
VK3CN	1 151	VK5RX	23 132
VK1SA	28 150	VK4AD	20 129
VK3EW	29 150	VK4EF	16 128
VK3VW	143	VK4QJ	36 126
VK2QL	5 142	VK4RF	11 125

OPEN

Call	No. Ctr.	Call	No. Ctr.
VK3JB	4 213	VK4K5	24 149
VK4HR	7 205	VK3PL	26 143
VK3JF	1 153	VK3CB	.. 10 138
VK3JG	12 180	VK3OP	.. 19 137
VK3HG	3 171	VK6DD	22 136
VK2DI	2 170	VK3LN	29 133
VK4P	32 170	VK2ADE	28 133
VK3EX	1 157	VK4VLA	13 128
VK4PL	10 167	VK4WF	49 128
VK3KW	3 165	VK2AHM	20 123
VK4DO	15 157	VK2NS	16 123

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2AFT still playing with full sized beams, gives a good account of itself. 2AHF fiddling with beams, only six S points back to front. 2AUH is really hitting the highs this month. 2XW appears to be a regular on 20 at night, five sig John. 2XH still a regular on a good job, not very much of late. 2AGX is still working on his ZEPPELIN, keeping up the questions and answers. 2ZF is keen on contacts with his a.s.s.c.; co-operation is necessary to get any place with his experiments.

2AWU the only chap around here to work DX regularly the beam is up, but 2000 watts is still 20' for some time, hope that he is the 144 Mc. boy. Sorry to hear of the sickness of Joyce 2AM1's father; hope to hear you soon Jack. 2ID appears to be getting his share at almost any time, must get the recipe. 2ABC is operating 20' with a rotating dipole, also on 144 Mc. again. 2MH on holidays at Kennebunk, operated portable there. 2ABZ 20' of most Bands recently, now 20' there. 2AM1 again Geoff. These are by courtesy of Ted.

NORTH COAST AND TABLELANDS

By the time these notes have been printed the third Urunga Convention will be history to be remembered and I trust you all had a splendid time. A full report on the proceedings will appear in the next issue for those who were unable to be in it. The North Coast Zone has had quite a few visitors this month, and con-

had quite a few visitors and
quite a number of N/C boys have gone visiting.
Mick TAYLOR has had a few days with Alf 2UC
at Lismore. VRID and VR2HJN are holidaying
near Urunga and Laurie 2MHM spent a period
at Kempspey and returned to Sydney via Tam-
worth. A visit to Grafton is 2W/H. Hamid
who is spending Easter with his father Alf
2APB has journeyed to Queensland to undertake
further training with D.C.A., whilst Douie 2SH
has gone to Parkes for a few weeks.
Not a month passes that there
is not some direct or indirect up a camp. Latest of
the prominent art's are Billie 2AAEY and Don
2UH. It is said that Billie succeeded in cracking
the chassis in two places and Don made a real
job of his. Jack 2JK is back on 40 once again
after deciding to give up the new power
unit. The new power unit was
supplied by Bruce MURRAY, no call sign, living at
the corner of Bruxton and Pitt St., Sydney.

son of Bruce Murphy, no call at time of write-

ing, shouldn't be long now. Terry 2AJS on holidays for a few weeks, heard on 20 mrx. Len 2LR busy building a new Tx in a small space, working out new ~~well~~

FOAMILDS AND LAKES

ZANU returned from his holidays at Mona with much gear and many ideas, on the way with a new xtal controlled converter for 144 Mc. 2VU can now listen on 144 Mc. using double conversion by feeding his responder unit into my multi RX. 2VU claims DX work using new beam with good results. SADT consistently worked to Sydney on 144 Mc. and also managed to catch some VK5s on 50 Mc. when the band opened 2E1 is also working on the mix. 2E1 has been helping us by picking up the local pings. 2VU has not reported his usual one night's activity for the month; don't let that work get you down Harry. 2RU has completed the beam for 2 m (4 over 4) and has now come to task with another 2E12 acting on 40 m and 144 Mc. made history by putting a signal into Cessnock on 144 from the water-logged Cessnock end 2WA works 6 and 40 mX and plans to take Cee to Urunga again this year. Even 2LX was heard on 40 mX this

SOUTH COAST

The Wollongong Club class is getting the final brush up in readiness for the exam. One of the boys worked his first WS (WSOLG) on 40 mx using 35W and getting one S point less than a local Ham using 100W, which speaks well for the equipment made out there. The next set of calls will be VK3AMW. Eric 2DV is very busy building a 2 and 6 mx TX and hopes to be finished before going to Urunga. Jim 2ADT not quite so busy calling CQ, as he is now working 10m and is now helping the locals to seek cures not CQs. Howard 2AMD busy chasing DX on 20 mpx using his new rack and panel job running 8W. John 2AUB busy chasing DX, new rig and with the knowledge at R.A.E.F., Richmond, we expect something good so hurry up John. Charles 2MT heard working a GW on 40 mpx and doing a fine job, but do not run the beam too hot! 2UK and 2VH still

home-building for the next two months, so will not hear from them for some time yet.

Jim 2AKM waiting for the a.c.s power mains to his 2KXZ. But Harry had been away so long that I am sure he will need glasses now. Harry 2AOX not had the best of health out his way; cheer up Harry, and hope to hear you soon. Col 2AGZ busy building, not heard much of late. Col 2ASF conspicuous by his absence lately. Perhaps having a well-earned rest after the bush fires down Eden way or maybe having a long sleep to make up for

HUNTER BRANCH

A representative gathering from most Hunter Valley towns was present at the Annual Meeting held at the Technical College, Newcastle, on 14th March. Although his calling prevents him actively participating in the Radio days these days, Allan Fife, President of 2KZ, was there alone. Allan declared he is still first and foremost a good Hunter Branch man. Allan took the chair at the invitation of the retiring Chairman while the new Vice-President was elected. The new officers were chosen by members to act on their behalf in the ensuing year. Pres. Lionel Swan 2CS; Vice-Pres. Fred Tread. Bill 2DZ; Sec. Ian Fraser 2DX; Treasurer John 2DZ, declined to oppose Lionel to whom he paid a glowing tribute. Pleasure was expressed by all at the election of office of 2DZ and 2XT, both of whom were re-elected. Many interesting facts were given to members by Lew Ansell 2TO, who is O.L.C. of the Newcastle Police Radio, when he spoke on "Development of Police Radio Communications". A special tribute to pioneer work done by Ham in the Force since the network was started in 1924. Some eight thousand messages a year are handled in Newcastle now.

W5SGH/mobile marine, radio officer on S.S. Michael J. Goulandris, was recently in Newcastle; Howard Walp hails from New Orleans Louisiana. Another visitor was 4K5X, winner phone section Jubilee DX Contest. Keith and family en route VK5 on caravan holiday called on 2AHA. Last, but not least, among the visitors was Taree Bill ZAEY.

Once again I'm indebted to 2DG for Maitland doings. Congrats to Keith on winning another Contest. Has just been advised by Swedish Amateur Society that he has been awarded first place in c.w. section 1950 European DX Contest. Two enquiring minds bodes to meet

Ernie's 2ZP is following his hopes to open a short but well-simulated break is 2AZKF. He's working hard and can't get near Tx. John 2XQ is working v's on the phone 20-20 with a 100w side band respect trouble with the antenna. Another to make a come-back 2ZL is another working well and has acquired 2W5F and is aiming to build a solid start from 2AAI's 2B10. Tom 7LS is permitting 2B10. 2B10 got his c.c. 807 keying well on 40-2PZ has joined the old "Gentlemen's" on 80 with 100w. Ernie has new freq. meter with 100w and a new power supply. 2AXM is building a new final around an 813. It's true boys, the old 2FP is building; Ernie is putting up a couple of 35T's; his new neighbor is still there but he's gone. But now his \$13 in commission now and building it out. Talking of neighbours, Phil 2ANG has shifted QTH; almost next door to 2ZC; 2AAI has shifted QTH; now RQE 20's 807's on 20 but Ron still has 2W5F with modulation. 2MR is on 20 but Edgar hopes to make it soon. 2ARK was XYL home again so Mac has more time for Ham Radio; interested in Reetham modulator. 2W5F is on 20-20 with 2W5F. 2W5F is on 20 for report and comments on his 20. George 2AGD is mostly on 20. Norm 2ANA rag-chewing on 40 phone.

Notice of Meeting.—The May meeting will be held on Friday, 9th, at the Technical College, Tighes Hill, Newcastle. Listen 2WI for details.

VICTORIA

CENTRAL WESTERN ZONE

One is surprised at the way a grudge is stored up for years and years until the right moment. That villain, J.M.C., waited for years to get even. I am 37, W.W. II, and I thought I had been overhauled in shortly after to see if I had my breath back. George, by the way, is putting out a nice signal with a very temporary antenna and the Type 3, the big rig is still on 3DE. The 3DE is still on 14 Mc. and the DX-1000 with 100W. to an 834 on 14 Mc. We can't blow them over whenever they appear and have quite a bug to date. JHL may or may not be trying to jam 3DE and put out our transmission on 14 Mc. and 2M. ARRL could copy Allan nicely thank you while he was going on 40 mc. ho-hum.

After checking 28 Mc. daily for weeks, 3ARL missed a beautiful opening on the only day

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he missed. Never mind Lin, we all skip sometimes—let it will come on the next 28-day cycle—by the way where is the 600 volt power supply? 3AKP has now lifted the QTH power supply to just on 200 volts, so should be able to appear in the not too distant future. 3XC, check up Bill, has not been a part of the crew—either I listen at the wrong time or something, but the Hornshaws boys seem quiet or late or have they all gone v.h.f.?

SARL has now checked up the v.f.o. with the Bendix and everything is lovely. Two new s.s.b. stations appeared on 3.5 Mc. of late. ZL4AF and ZLIAW, both have good signals, which are not difficult to receive. ZL4AE has been invited to date for the first VK4-ZL s.s.b. contact on 3.5 Mc.

Zone members are asked in future on zone hook-ups, if skip is long on 7150 at 1000 hours, to change to 3.5 Mc. at 1015 hours where control will be on approx. 3380 Kc. That is on the second Sunday of each month.

EASTERN ZONE

I had intended to publish this job onto 3SG again this month, but after the way he labelled me last time I thought I'd better do the job myself. Leo isn't a bad sort, though, and he has just discovered that p.p. 8973 don't always behave as the book says they do!

The field day held on 6th April was quite a good show with perfect weather, and much useful knowledge concerning antennas, especially top loaded ones, was gained by the mobile chaps. Graham 3QZ had a breakdown with his mobile, so had to use car but apparently 3ALZ was the only one with a baf in his Rx! Graham did manage to slaughter an outside in snakes, though. Much enthusiasm was shown by Peter 3IZ, who sent his mate John, down to Timor for some days, the round trip taking about 10 days. April from running out of petrol, and falling off his motor bike, John had a nice run—I hope!

The store has been around again—Norm 3AN and Graham 3GO, each acquiring a new YL junior cp. Councillor, and others appear to be improving and the line-up on 3SSS Ken St. days is very satisfactory. We are still waiting for 3IO and 3AJA to join the hook-up. What about you blokes buying a xtal between you two, so as to have a v.h.f. v.t.v.s. VK3 by the time the hits the newsstands, hit avionics by the writing about the future, but for the benefit of a trio of v.h.f. enthusiasts—there are ominous signs that 3SS will be heard on 50 Mc. before long! Believe it or not.

NORTH EASTERN ZONE

Things were very bright at the zone hook-up with a record 14 on the air. Strangers in 3ACK and 3T12 were welcomed back into the fold. 3ACW, however, his wanderings are not apparently being made to any set plan. Thought we would have seen you Chas. 3UI and 3APF experimenting on 288 Mc., but I never thought I would see the day when the exponents of xtal controlled converters and Tetrodes would descend to the low level of mod. osc. 3JC still in the midst of 20 mx beam troubles. You would never believe some of the queer things it does. Consider an 11 foot monopole got the 3JC to work, but lost it to a local electrical interference. Hasn't been game to look on 20 since. 3AJE had good modulation now, what did you do Les? 3VV back with us again giving lots of cheek. Dicks seem to predominate the zone hook-up, come on all flavours, so it seems. 3KR had a visit by 2NSZ.

Last v.h.f. field day, 3UI and SJC journeyed to Mt. Major and once again contacted 2PN on 7 Mc. The occurrence was happening to often not to become a regular. Most local stations gave us the go by. Everything lined up for next field day which is the last. Somebody must have received the mag early this month. The picnic was reported to be held at the suggestion of 3CJ at Northgate—what you asked for as it Sid. However I agree with you Sid, about it being a good spot. Residents will be warned before Les 3AJE takes a plunge—don't warn me, tell it. 3CJ DXpedition on 10 m. also went on particularly well. 3CJ did have up spare parts whilst in Melbourne. Now hasn't time to assemble same in desired circuits.

GEELONG AMATEUR RADIO CLUB

A field night was recently arranged for members of the Club. The Tx. which operated on 80 mx under the Club's call 3ATL, was hidden by the President of the Club, 3AKB, and Peter Swartwout, Fyston. First to arrive were 3SY, 3ALG and Max Stock. These three did a good job in hiding it and added 100 yards of mike lead from the Tx.

At the next meeting several items re the Club were discussed. This took the whole evening up. The main item was arrangements for the forthcoming South Western Zone Convention to be held in Geelong. A visitor to

the Club was Mr. Ted Blackney who was nominated for membership by 3AKE. The Geelong hook-up still takes place at 2000 hours every Thursday night. —

QUEENSLAND

By the time these notes appear in print, the new Council for the VK4 Division should be comfortably ensconced in office. Except for three new members, those who shouldered the burden last year stay put. Stout "fellas." The three new faces to grace the Council board are Mr. G. R. Howden, 4AW, Mr. G. J. Smith, 4T2, and Alf Gudiford 4AP in the positions of Federal Councillor, VK4WI Station Manager, and Divisional Sub-Editor, respectively.

PRESIDENT'S REPORT

Presented at VK4 Annual Dinner, March 29

Gentlemen and Members—It is my privilege to present to you a resume of the Division's affairs for 1951-2. During this period, membership has decreased by 55, including 25 full members and 30 associate. However this loss is partly offset by the enrollment of 32 new members, bringing our present total to 201 and, as most of the year lies ahead, prospects of increased membership are really good. Like-wise, financial position is good and will be reflected from a personal of the balance sheet which will be sent to all members with an early issue of our own little publication, "QTC." The No. 1 Account, admittedly shows only small cash carry over, but what may be considered as the Division holds equipment worth approximately \$150, including a modern duplicator which will more than save its cost over the ensuing years. As regards the No. 2 Account, the happy result of disposal equipment sales, I am pleased to state that this is being held in trust for allocation at a later date to permanent headquarters for the VK4 Division.

Our departments, QSL Service, Station 4WI, "QTC," Library Service, etc., have been fully maintained and, I believe, each appreciated. Council itself has functioned actively, smoothly, and with almost 100 per cent. attendance figures. We lost three councillors of real value at the termination of the year and to them I wish to tender our thanks for their unstinting service.

Equipment Library—Funds and personnel

allow now this much needed service to slowly

come into operation. Some of the equipment

for electronic measurements is available and will be added to as time permits.

Contest Committee—This newly formed group has been busy framing contests of a local nature for VK4 members. Details will appear monthly in "QTC" and your earnest support is requested.

Student Classes.—The class, as last year, is in the capable hands of Mr. Tom Athway. Every assistance is given to those anxious to attain the V.C.P. as well. In this section that our future will be assured.

Emergency Network—Arthur 4AW, a past president of several years' standing, has continued with this most important section. Net members now number 50 and areas covered including Mornington, Dandenong, Tullamarine and the Eastern suburbs. Meetings are arranged for the remaining country districts. Net drills are held on the third Sunday morning of each month and those anxious to participate should contact 4AW.

Summer Dam Convention—I was fortunate to be present at this Convention, held early this year and cannot speak in sufficiently glowing terms in praise of the tremendous efforts by Messrs. 4FD and 4GG to make the 2nd Convention a reality. It is not necessary for me to add that more functions of like kind are eagerly awaited.

Station VK4WI—Almost without exception 4WI has been on the air every Sunday morning for the dissemination of Divisional news to both members and citizens at large. Our thanks go to the past Station Managers, 4FN and 4WD, for their sterling work in winning and holding members. In connection with 4WI I must strongly stress that there is always an urgent need for a newer member. The other fellow is just as interested in your doings as you are in his. Direct all items of interest to the new Station Manager, Osrie 4TN and thus help him maintain the high standard of past boasting.

In a short report such as this, I cannot cover the whole of our Divisional activities. However, we have adopted a new universal Divisional Constitution which so far suits our needs as could possibly be the forerunner of the federalisation of our divisions. Also we have done, and will continue to do, everything possible to uphold Queensland Division's interests and affairs in the high standards set in the past. As regards myself, a member of the Division, I would like you on occasions throughout the year to consider your justification as an Amateur, and give thought to the privileges

you now enjoy. In this connection I suggest that you pay more attention to the use of the high frequency channels; that you take advantage of new technique such as s.s.e.c. transmission and reception; and that from time to time you review latest technical trends and thus these new trends to influence your radio

In conclusion, I urge all members to conduct their operational activities so as to comply strictly with the regulations, and thus maintain our self government and the confidence and respect which has been shown to us in the past by the postmaster general's Department. (Signed) V. (VK4VJ), President.

CLARE'S CORNER

Absent on 20 lately a 4PKX session, new 10 mx beam, 400 watts, has challenged up over 100 contacts with F3FT. Ballarat visitors, 3GR and XYL here recently. Bob visited quite a few of the boys. Pleased with the results from his new vertical 4RF; looks forward to even better results. 4RZ has been working hard and is experimenting with a ZL Special and getting his fair share of DX. Active on 20 with nice phone signal is 9BD; love to hear that laugh of 9YT's.

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Holding correspondence with the other running clubs to the deadline for these notes with the birth of his baby daughter a month or two back, I now find myself forced to admit that Mary Elizabeth EWZ arrived in Geraldton on March 1st, the mother having three days after her dutiful father had posted his notes to Melbourne. Wouldn't it? Still, I'm getting used to hearing her SH plus signal at about 6000 hours east morning and evening, what does everybody? Everyone who sees her says she's a beautiful kid—which isn't surprising when you cast an eye over her father. (Or is it? Don't answer that.)

The last batch has been doing the most amazing things during past weeks. Contacts between country and city have been most erratic and to cap 6LG's effort in hearing 2S stations on phone at the height of the day, you truly heard him call me in (what optimist!) 2S on c.w. at 12.20 p.m. on recent Sunday. Need I say no contact resulted? I need not. The same band brought to light an HBB station (you heard—HBB) the bring Marconi with him, and overall the VPKs began tearing their hair or booking their passages to the sunny West. I should add that HB9GK/MM was operating on 7 Mc. in Fremantle Harbour!

The price of the "Woden" Modulation Transformers, advertised by Wm. Willis & Co. on page 8, is £11/6/6 including Sales Tax.

6CN has left Geraldton and is now set-up in his own business as a master mill-roller at Kettlerberg. The Geraldton boys will miss you, Cyril, and wish you every success in your venture. If Cyril still remains a Ham after all that's happened to him in recent years, then "dip me lid" to him. He has moved to a flat, for a spell, then moved from the small beach cottage he occupied to a larger house in an a.c. area, but at a time when no new connections to the service were being made. He had to pay for the a.c. laid on to nearby houses, but none for 6CN for a couple of years, then, at long last, came the a.c. Cyril began slowly (as time permitted and it didn't permit much or often) to complete his work in a reasonably neat type of steel cabinet. At the time of leaving Geraldton, Cyril hadn't quite completed that du lux rig. Did he take it with him? No he sold it—for at his new QTH—yes, you've guessed it—he's back on d.c. again! What a saga.

Another bloke who should make you city-slackers pause and think how lucky you are is 6RT. After some years on battery he's charged up to generators. Len spent about 12 months in Cue on 220 volt d.c. After his term there did they send him to be headmaster of a large metropolitan school? They didn't. They posted him to a power station where there's a a.c. motor and other kind of equipment. In Len's tank circuits. Nothing daunted, Len bought a small engine and a 220-volt motor, revamped the latter to act as a generator, and laid on his own d.c. mains. After some preliminary bother, everything is now on the air on 80 and 40 with low power but getting out quite well.

6BR who is now a Geraldtonite is inactive in the Ham game at the moment, but is busy with study, hunting around for a bricklayer and practising his guitar. Fair dinum! Not the kind of hypnotism you chaps use to convince the XYL that Ham Radio is a wonderful hobby but the real McCoy. As the a.c. man very much nearer 6VZ's QTH, he's been the next to go. I must get Barry to give me a few lessons. With plenty of 50-cycle stuff around the house I might put in a pair of 813s in p.p. when the R.T. comes around I'll make a few passes in the dark and hope he goes away convinced that there's only 6V8s and I'm running a paltry 20 watts!

6WD of Northam was heard recently; where have you been, Wally? Still on d.c.? 3.5 Mc seems to have shown a little promise lately and 6LG and 6RT are known to have been

active. Wonder if Lionel has been on there yet? Heard him on 7 Mc. the other day telling someone all his woes. Well, Ollie's in the 7 Mc. band, you hearing to see often?

Recent Institute hanpanings have been well publicised in both broadcasts and circulars so there is no need to go over stale news here where space is valuable. However, however, seems to demand comment and that is the suggestion that general meetings should deal with resignations in much the same way as they deal with applications for membership, the feeling being that as there is no meeting it should also be charged with accepting or rejecting one's resignation if and when such is tendered. That seems to be a point of view no one could quarrel with.

The new Council for 1962 was elected with out there being more than the required number of nominations—indeed there was actually one less than the nine needed—therefore there was no room for pallies. One extra member to make up that nine will be co-opted. Those nominated and declared elected are 6HC, 6AG, 6KW, 6RU, 6HO, 6KU, 6GM and 6LA.

In conclusion, I like to thank all those who wrote and sent their news for the April issue and to apologise to them for not having answered them direct by mail owing to pressure of work. Perhaps by the time this appears I'll have written to you chaps and also perhaps you may feel disposed to return the process. No scribbles can have too many spines.

TASMANIA

For those of you not already aware, the following officers have been elected: President: Bob O'MAY 7OM, re-elected; Secretary, Ted Evans 7OM; Assistant Secretary, Bob Fulton 7AF; Treasurer, Sir Edward 7SI; and Vice-President Tom Allen 7AI. In addition, I feel sure I am voicing the wishes of all, when I extend to the retiring Secretary, Lee Edwards, our very sincere thanks for a job well done. Lee was unique in his efforts to render service to the Institute, and I am certain that many, if not all, were sorry when it was realised that he could not see his way clear to continue. A big "thank you" also goes to the continuing Treasurer, Brian Hall, for his continued service in the past year of office. In farewelling the "old", we must not neglect the "new", and our best wishes are extended to those newly appointed officers mentioned earlier. It is hoped that they will bring in with them your continued support, and thus help to form the Institute into an even more unified body.

Jack 7JB is now ensconced in Kure, Japan and is keeping quiet with military military. Having untangled certain licence difficulties, Jack hopes to show up soon now in the 20 m band, with a mere 600w, into a wind-hung antenna. We will be listening for you Jack, and I hope you'll call us on 7 or 14 MHz on certain "mod cons". Your XYL however, was quite adamant when she stated that she would not allow you to souvenir any of those "house girls" to bring home with you.

Two more Tasmanian members have joined our ranks recently. Mr. J. O. Webb, of St. Helens, and Mr. M. H. Hurburgh of Hobart. In addition, Bert Clark and G. Kerrison now answer to the calls 7BC and 7AO respectively. It is a fact Bert is still intent on opening on 596 Mc., or is it just idle rumour?

It should not be long now before 7FM is back on the air again. An enforced silence, brought about by a non-co-operative h.v.f. transmitter due to terminate any time now. Semiconductor 7FM will be back with what it does, and little time to do it in but made it in time for the Sunday broadcast. A nice signal Ted, and modulation very pleasing to the ear. 7LE joins 7DH with 144 Mc. and 7AJ with 70 Mc. This is the best way to prove it is 7F. "If they have halos, you know they are not police." Keith 7RX is contemplating 2 mx, but somehow I feel that 20 mx will have to completely collapse first. What about proving me wrong Keith?

Attempts at 144 Mc. relays have been made by 7LE and 7OM, the first on 9th March and later on 6th April. The first attempt resulted in a 144 Mc. relay being established, being established from Mt. Wellington to 7AJ and 7DH at Mt. Seymour, and on 6th April similar results were obtained from Mt. Wellington to northern members of the 7VX Tx site. The former was a bit of a fiasco, but still not to be covered by 7AJ in his v.h.f. notes.

The April meeting was held at the usual place on 3rd April. Some 20 odd members attended, and the usual fare was served. The main item for the 22nd Federal Convention, followed by an auction sale of surplus radio equipment. Star turn of the sale was 7AL's rather expensive purchase, by proxy, of some xtal grinding materials. Getting two chaps to bid for you, unknown to each other, is certain to cause inditation Tom!!

NORTHERN TASMANIAN ZONE

V.H.F. officer 7LZ has been very busy recently organising the 144 Mc. field day for 6th April, and everything including the weather, went off without a hitch. 7LZ had charge of his equipment and operated the gear throughout the day whilst 7AM provided the transport. Members of the zone who assisted in one way or another were 7AM, 7LX, 7KX and 7WB. Geoff Dineen, Graeme Nicholls and Ron Rich. First class communication was had with 7OM and 7LE from Mt. Wellington and 7KB in Burnie, but 7KJ proved very elusive. The site used was a few hundred yards from the aerial system of 7KB, station 7EX (who made a 200' pole available) and is nearly 1,000 ft. above sea level.

Prior to this field day there had been considerable activity on 144 Mc. as beams and end-feeding had turned 7AM into a 12 element beam painted "cornflower blue" whilst 7LZ uses "silver" and 7PF has his in "brick red". Is anyone game to use "Pansy pink"?

7Mc. came good recently in the early evening hours. 7RK could be heard upholding the c.w. honor of the zone. 7LX is considering taking to c.w. again as some of his neighbours complain that they can hear him. 7AM has had a call from Ken's phone, QSO. Rumour has it that 7WX has actually been copying Ws on 7 Mc. c.w. and actually took the key out of moth balls. 7DS, 7TE, 7DB, 7HY, 7CA and 7RB appear to have gone into retirement for the time being, but all hope to become active again as soon as time permits.

A recent visitor has been Max 3AKM who has been taking his holidays in 7KT and attending an amateur meeting. He has shown improvement recently so remember it is the second Friday in each month and the more that turn up the better it is for the zone, so how about doing YOUR part.

HAMADS

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Advertisements under this heading will only be accepted from Institute Members who desire to dispose of equipment which is their own personal property. Copy must be received by 8th of the month, and answers will be given in the next advertisement. Calculation of cost is based on an average of six words a line. Dealers' advertisements not accepted in this column.

AR301/AV Receiver converted for 144, want Class "C" Wavemeter, D104 or N80, or s.e. or sell. 6 Queens Road, New Lambton, 2N.

EXCHANGE.—Type 3 Mk. II. complete and 4½w. portable modulator for Communication Receiver, BC548, etc. Cash adjustment if required. C. Blackmore, Kerang, P.O., Vic.

FOR SALE.—H.R.O. Senior, rack model complete with coils, built-in power supply, speaker and xtal calibrator, £60, or would exchange for good secondhand lathe 3" or above. S. G. Kitchen, Seven Mile Beach, Hobart.

FOR SALE.—Palec Model VCT-V Valve and Circuit Tester, good order, £15. J. Oliver, Latrobe, Tasmania.

FOR SALE.—R-107 8-w valve Rx covering 1.1 Mc. to 17.5 Mc. in 3 bands. 12v. d.c. and 150-250v. a.c. pwr. supply with handbook. £25. B. Powell, c/o. ANZ. Bank, 394 Collins St., Melb. (M 1951 Ext. 11).

FOR SALE.—Type W1081 Frequency Meter, £16; Beam Motors, £4; 6 mx Tx, £8; 10 and 20 mx Tx, £12; 40-80 mx Tx, £9; 40w. Mod., £30. B. E. Cabena, 20 Uvadale Gr., Kew; Haw. 2571.

TA12D completely converted for 80, 40, 20, partially for 10. To sell or exchange for modulator for 100 watts. Call or write 3 Ardoch St., Essendon.

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